UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/897,100	07/03/2001	Takeshi Ishida	826.1734	1690

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EXAMINER
SORRELL, ERON J

ART UNIT	PAPER NUMBER
2182	

DATE MAILED: 05/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/897,100	ISHIDA ET AL.
	Examiner	Art Unit	
	Eron J. Sorrell	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>21 February 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-12</u> is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-12</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>23 July 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a)☒ All   b)☐ Some * c)☐ None of:

  1.☒ Certified copies of the priority documents have been received.

  2.☐ Certified copies of the priority documents have been received in Application No. _____.

  3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114,
including the fee set forth in 37 CFR 1.17(e), was filed in this
application after final rejection. Since this application is
eligible for continued examination under 37 CFR 1.114, and the
fee set forth in 37 CFR 1.17(e) has been timely paid, the
finality of the previous Office action has been withdrawn
pursuant to 37 CFR 1.114. Applicant's submission filed on
2/21/06 has been entered.

Claim Objections

2.   Claim 9 is objected to because of the following
informalities: There appears to be a typographical error at
line 7 reads, "amount the service servers," instead of "among
the service servers." Appropriate correction is required.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the second paragraph of 35
U.S.C. 112:

> The specification shall conclude with one or more claims particularly
> pointing out and distinctly claiming the subject matter which the applicant
> regards as his invention.

4.   Claims 1-5 and 7 are rejected under 35 U.S.C. 112, second

paragraph, as being indefinite for failing to particularly point

out and distinctly claim the subject matter which applicant

regards as the invention.

5.   Referring to claim 8, the preamble recites both a storage

medium readable by an information device (an apparatus) and a

method. Per MPEP 2173.05(p), "A single claim which claims both

an apparatus and the method steps of using the apparatus is

indefinite under 35 U.S.C. 112, second paragraph. In Ex parte

Lyell, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990).

Claim Rejections - 35 USC § 101

6.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine,
> manufacture, or composition of matter, or any new and useful improvement
> thereof, may obtain a patent therefor, subject to the conditions and
> requirements of this title.

Claims 1-5,7, and 8 are rejected under 35 U.S.C. 101 because the

claimed invention is directed to non-statutory subject matter.

7.   Claims 1-5 and 7 are directed toward a program, per se,

which is merely descriptive material. Descriptive material can

be characterized as either "functional descriptive material" or

"nonfunctional descriptive material." In this context,

"functional descriptive material" consists of data structures
and computer programs which impart functionality when employed
as a computer component (emphasis added). "Nonfunctional
descriptive material" includes but is not limited to music,
literary works and a compilation or mere arrangement of data.
*Both types of "descriptive material" are nonstatutory when
claimed as descriptive material per se.* Warmerdam, 33 F.3d at
1360, 31 USPQ2d at 1759. *When functional descriptive material is
recorded on some computer-readable medium it becomes
structurally and functionally interrelated to the medium and
will be statutory in most cases since use of technology permits
the function of the descriptive material to be realized.* Compare
In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed.
Cir. 1994) (claim to data structure stored on a computer
readable medium that increases computer efficiency held
statutory) and Warmerdam, 33 F.3d at 1360-61, 31 USPQ2d at 1759
(claim to computer having a specific data structure stored in
memory held statutory product-by-process claim) with Warmerdam,
33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure
per se held nonstatutory). See ANNEX IV of the "Interim
Guidelines for Examination of Patent Application for Patent
Subject Matter Eligibility."

8.   Referring to claim 8, the preamble recites both a storage

medium readable by an information device (an apparatus) and a

method. Per MPEP 2173.05(p), "Such claims should be rejected

under 35 U.S.C. 101 based on the theory that the claim is

directed to neither a "process" nor a "machine," but rather

embraces or overlaps two different statutory classes of

invention set forth in 35 U.S.C. 101 which is drafted so as to

set forth the statutory classes of invention in the alternative

only. Id. at 1551."

                    Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which

forms the basis for all obviousness rejections set forth in this

Office action:

> (a) A patent may not be obtained though the invention is not identically
> disclosed or described as set forth in section 102 of this title, if the
> differences between the subject matter sought to be patented and the prior
> art are such that the subject matter as a whole would have been obvious at
> the time the invention was made to a person having ordinary skill in the
> art to which said subject matter pertains. Patentability shall not be
> negatived by the manner in which the invention was made.

10.   Claims 1-12 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Choquier et al. (U.S. Patent No. 5,951,694

hereinafter "Choquier") in view of Donaghue, Jr. (U.S. Patent

No. 6,226,377 hereinafter "Donaghue").

11.   Referring to program claims 1 and 7, method claim 6,

machine readable medium claim 8, and apparatus claim 9, Choquier

teaches a method, apparatus and program causing an information

processing device (administration servers 134, see lines 4-12 of

column 24) to execute a service managing method accommodating a

plurality of service servers each rendering a service via a

network in response to a service request from a client, and

distributing the service request to the plurality of service

servers (see lines 26-35 of column 23), said method comprising:

      managing the plurality of service servers by dividing the

service servers to define a plurality of groups of service

servers and dynamically shift service servers among the

plurality of groups and render a service as a service quality of

a group to which the shift is made (see lines 36-48 of column

23); and

      reducing a load on a service server within any of the

plurality of groups by using at least one service server with

the lightest load as the service server within any of the

plurality of groups, when the load on the service server within

any of the plurality of groups increases, and a quality level to

be rendered by any of the plurality of groups cannot be

maintained (see lines 34-53 of column 24, wherein Choquier

teaches determining when to add servers from one group

experiencing high load from a group with a lower load).

Choquier fails to teach the service servers are grouped

depending on quality levels of the rendered services into a

high, low, and intermediate service groups.

Donaghue teaches, in an analogous system, the service

servers are grouped depending on quality levels of the rendered

services into a high, low, and intermediate service groups

(Donaghue teaches 1st, 2nd, and 3rd priority levels) and

reassigning servers between the server groups based upon the

load and level of service (see lines 45-63 of column 8).

It would have been obvious to one of ordinary skill in the

art at the time of the applicant's invention to modify the

system and method of Choquier with the above teachings of

Donaghue in order to more effectively utilize the available

resources and maintain service level agreements as suggested by

Donaghue (see lines 55-58 of column 1).

12. Referring to claim 2, Choquier teaches the plurality of

service servers that are grouped comprise a storing unit storing

information to which group each of the plurality of service

servers belongs (see lines 21-27 of column 9).

13.   Referring to claim 3, Donaghue teaches a service quality is

the response time of the service server (see lines 44-52 of

column 5).   It would have been obvious to one of ordinary skill

in the art at the time of the applicant's invention to modify

the system and method of Choquier with the above teachings of

Donaghue for the same reasons as mentioned above in the

rejection of claim 1.

14.   Referring to claim 4, Choquier teaches, the method further

comprises recording and managing a log of service requests (see

lines 33-46 of column 10); and generating a schedule for each

date or day of the week based on the log recorded in the log

managing step, and changing a way of dividing the service

servers into groups according to a generated schedule (see lines

27-35 of column 23).

15.   Referring to claim 5, Choquier teaches each of the

plurality of service servers executes a load measuring step

measuring a load value that a local service requires to process

a service request; and teaches a server is shifted to a

different group based on a load value of each service server,

which is notified from the load measuring step.

Choquier fails to teach the service servers are grouped depending on quality levels of the rendered services into a high, low, and intermediate service groups.

Donaghue teaches, in an analogous system, the service servers are grouped depending on quality levels of the rendered services into a high, low, and intermediate service groups (Donaghue teaches 1st, 2nd, and 3rd priority levels) and reassigning servers between the server groups based upon the load and level of service (see lines 45-63 of column 8).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system and method of Choquier with the above teachings of Donaghue for the same reasons as mentioned above in the rejection of claim 1.

16. Referring to claim 10 Choquier teaches a system providing services over at least one network, comprising:

service servers grouped according to services provided (see lines 36-48 of column 23), however fails to teach the service servers are grouped depending on quality levels.

Donaghue teaches, in an analogous system, the service servers are grouped depending on quality levels of the rendered services into a high, low, and intermediate service groups

(Donaghue teaches 1st, 2nd, and 3rd priority levels) and reassigning servers between the server groups based upon the load and level of service (see lines 45-63 of column 8).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system and method of Choquier with the above teachings of Donaghue in order to more effectively utilize the available resources and maintain service level agreements as suggested by Donaghue (see lines 55-58 of column 1).

17. Referring to claims 11 and 12, Choquier teaches, a load shifting unit reducing a load on a selected server within any group of the service server wherein the load shifting unit reduces the load on the selected server by shifting a portion of the load from the selected server to at least one server having a lightest load (see lines 34-53 of column 24, wherein Choquier teaches determining when to add servers from one group experiencing high load from a group with a lower load).

Donaghue teaches, in an analogous system, the service servers are grouped depending on quality levels of the rendered services into a high, low, and intermediate service groups (Donaghue teaches 1st, 2nd, and 3rd priority levels) and

reassigning servers between the server groups based upon the
load and level of service (see lines 45-63 of column 8).

It would have been obvious to one of ordinary skill in the
art at the time of the applicant's invention to modify the
system and method of Choquier with the above teachings of
Donaghue for the same reasons as mentioned above in the
rejection of claim 1.

Response to Arguments

18.   Applicant's arguments with respect to claims 1-12 have been
considered but are moot in view of the new ground(s) of
rejection.

Conclusion

Any inquiry concerning this communication or earlier
communications from the examiner should be directed to Eron J.
Sorrell whose telephone number is 571 272-4160. The examiner
can normally be reached on Monday-Friday 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are
unsuccessful, the examiner's supervisor, Kim Huynh can be
reached on 571-272-4147. The fax phone number for the
organization where this application or proceeding is assigned is
571-273-8300.

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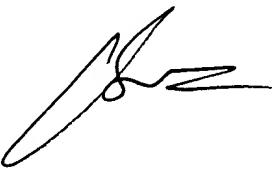
KIM HUYNH
SUPERVISORY PATENT EXAMINER

4/28/06